Fig. 1

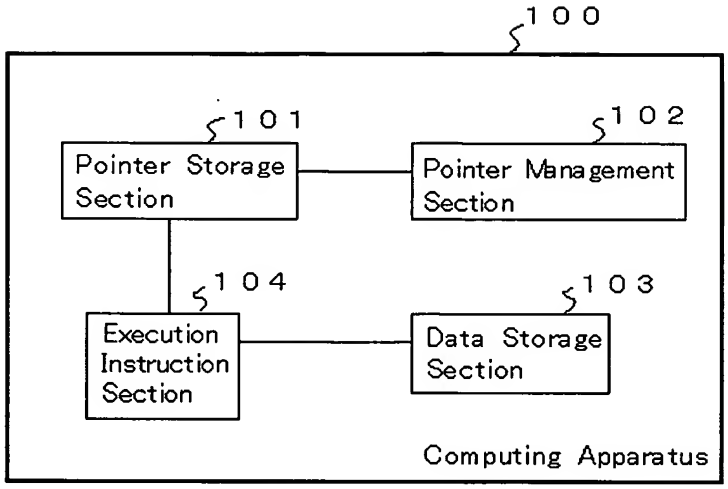

100
101
Pointer Storage Section
102
Pointer Management Section
104
Execution Instruction Section
103
Data Storage Section
Computing Apparatus

Fig. 2

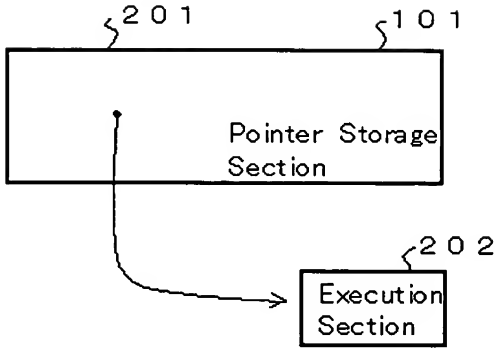


Fig. 3

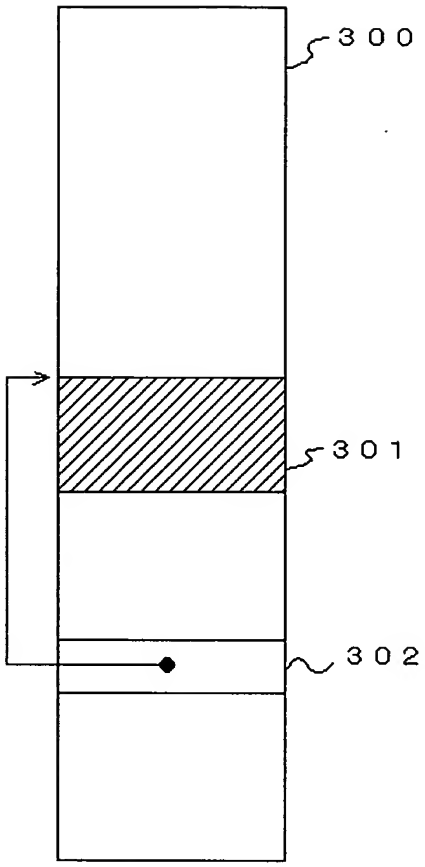
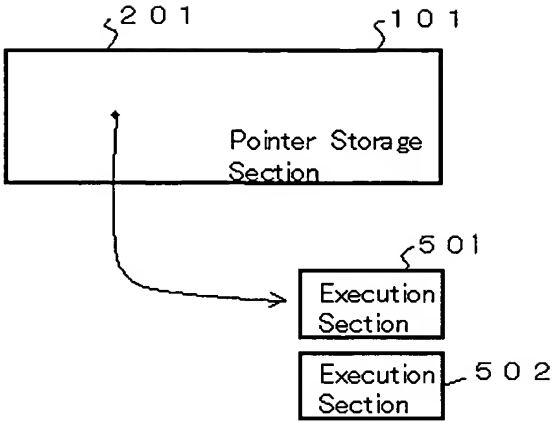


Fig 4

```
void  (* fp)();                    ・・・    (a)



void                               ・・・    (b)
f(dp)
 void *dp;
 {
     ⋮

 }


main()
{                                  ・・・    (C)
     ⋮
   fp = f;                         ・・・    (d)
     ⋮

}
```

Fig. 5

(a)


201
101
Pointer Storage Section
501
Execution Section
Execution Section
502

(b)

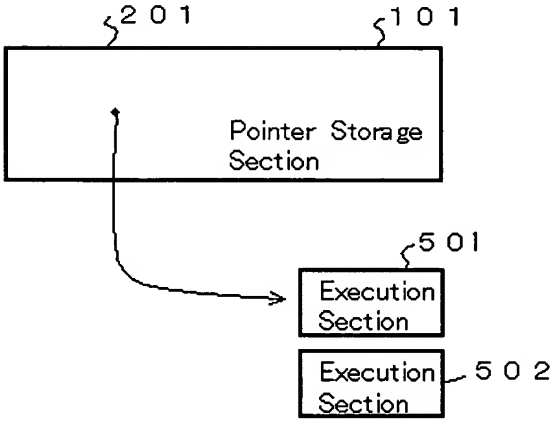

201
101
Pointer Storage Section
501
Execution Section
Execution Section
502

Fig 6

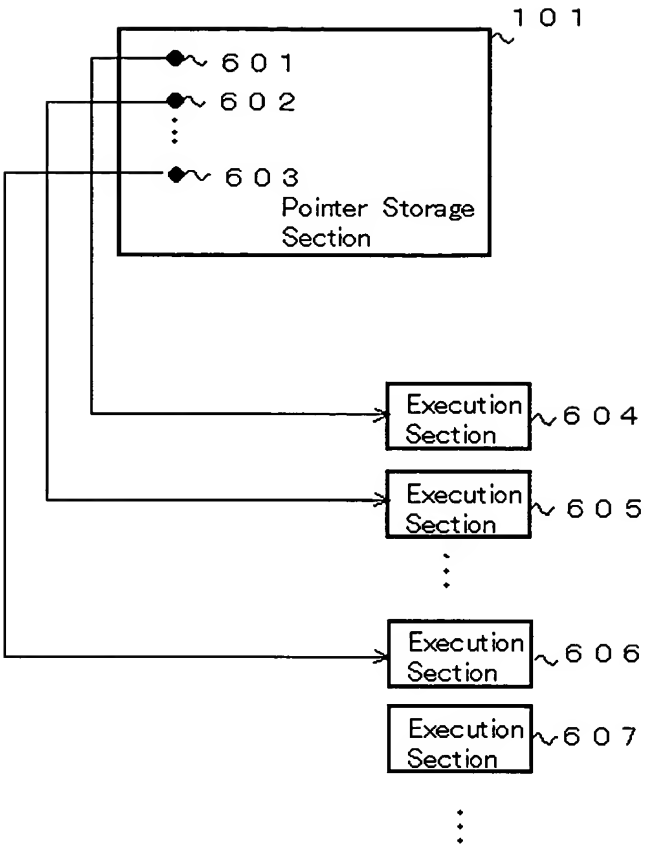

101
601
602
603
Pointer Storage Section
Execution Section
604
Execution Section
605
Execution Section
606
Execution Section
607

Fig. 7

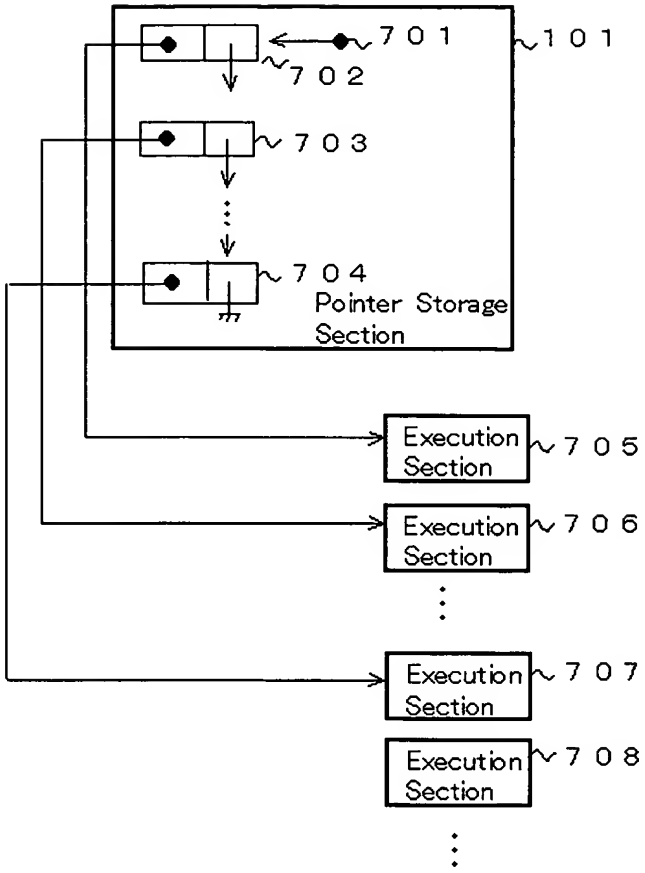

701
101
702
703
704
Pointer Storage Section
Execution Section
705
Execution Section
706
Execution Section
707
Execution Section
708

Fig. 8

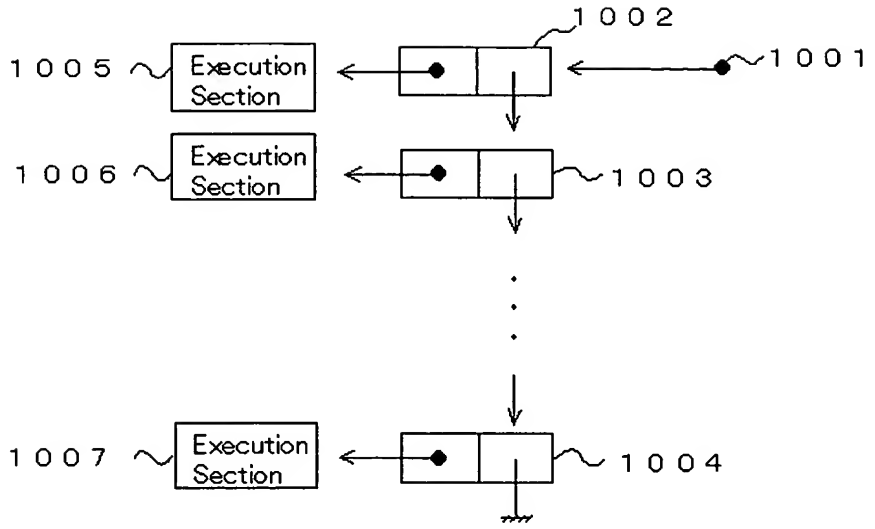
```
struct  pointerlist  {
        void  (*fp)();                  · · ·       (a)
        struct  pointerlist   *next;    · · ·       (b)
}  *pointerlistbase;
```

Fig 9

```
void  *p ;                          · · ·      (a)

      ◆
      ◆
      ◆

P = (void*) 0×37468AB8;             · · ·      (b)

      ◆
      ◆
      ◆

(*fp)(p);                           · · ·      (c)
```

Fig. 1 0

(a)


1002
1005
Execution Section
1001
1006
Execution Section
1003
1007
Execution Section
1004

(b)

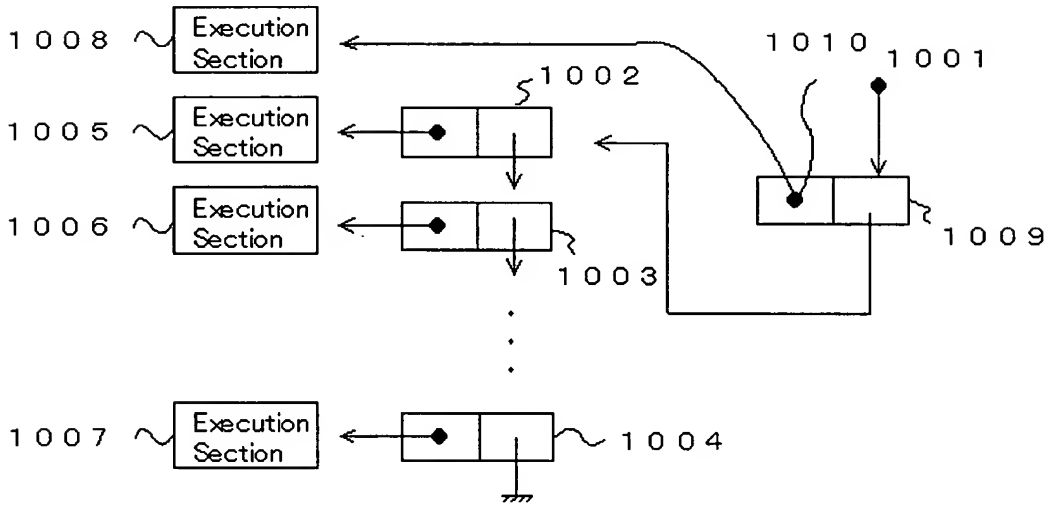

1008
Execution Section
1010
1001
1002
1005
Execution Section
1006
Execution Section
1009
1003
1007
Execution Section
1004

Fig. 1 1

```
struct   pointerlist   *pl;                    ・・・  (a)

pl = malloc (sizeof  *pl);                     ・・・  (b)

pl —>  fp = g;
pl —>  next = pointerlistbase;                         (c)
pointerlistbase = pl ;
```

Fig. 1 2

```
struct  pointerlist  *pl;                          . . .      (a)

pl  =  pointerlistbase;
pointerlistbase  =  pointerlistbase  —>  next;                (b)

free (pl);                                         . . .      (c)
```

Fig 1 3

```
struct  pointerlist  *pl;
int                    n;
void                  *p;
```

· · · (a)

```
P = (void*) 0×37468AB8;
```

· · · (b)

```
pl = pointerlistbase;
```

· · · (c)

```
for ( n = 0; n < 3; n++)
    pl = pl —> next;
```

· · (d)

```
( *pl —> fp)(p);
```

· · · (e)

Fig 1 4

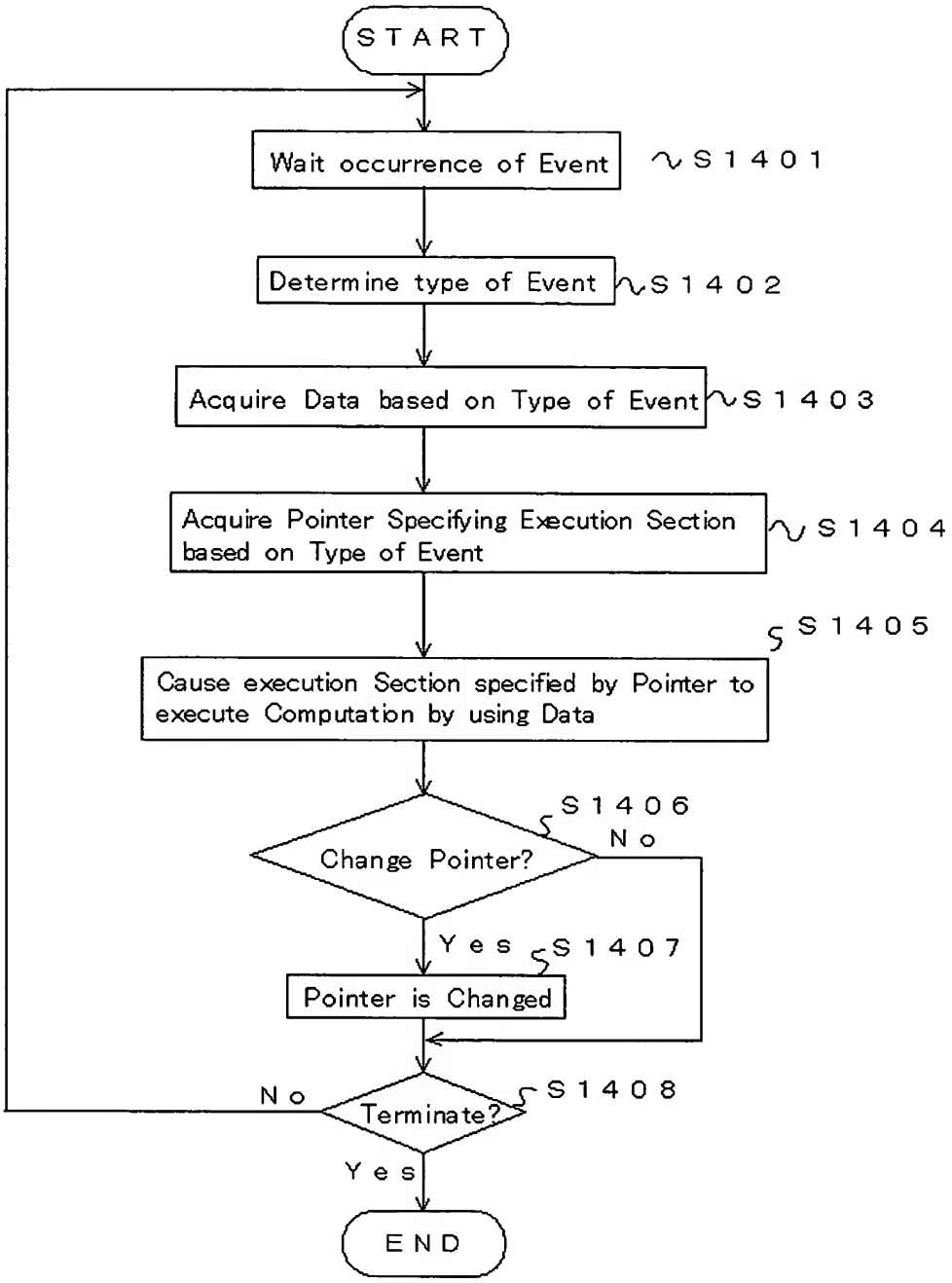
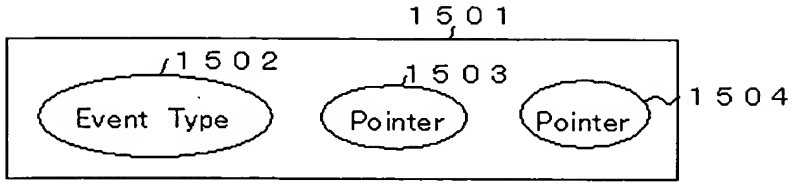

START
Wait occurrence of Event
S 1 4 0 1
Determine type of Event
S 1 4 0 2
Acquire Data based on Type of Event
S 1 4 0 3
Acquire Pointer Specifying Execution Section based on Type of Event
S 1 4 0 4
S 1 4 0 5
Cause execution Section specified by Pointer to execute Computation by using Data
S 1 4 0 6
Change Pointer?
No
Yes
S 1 4 0 7
Pointer is Changed
No
Terminate?
S 1 4 0 8
Yes
END

Fig 1 5

(a)



(b)

```
struct  {
   enum  eventType    et;
   void          (*fp)();
   void              *dp;
};
```

Fig. 1 6

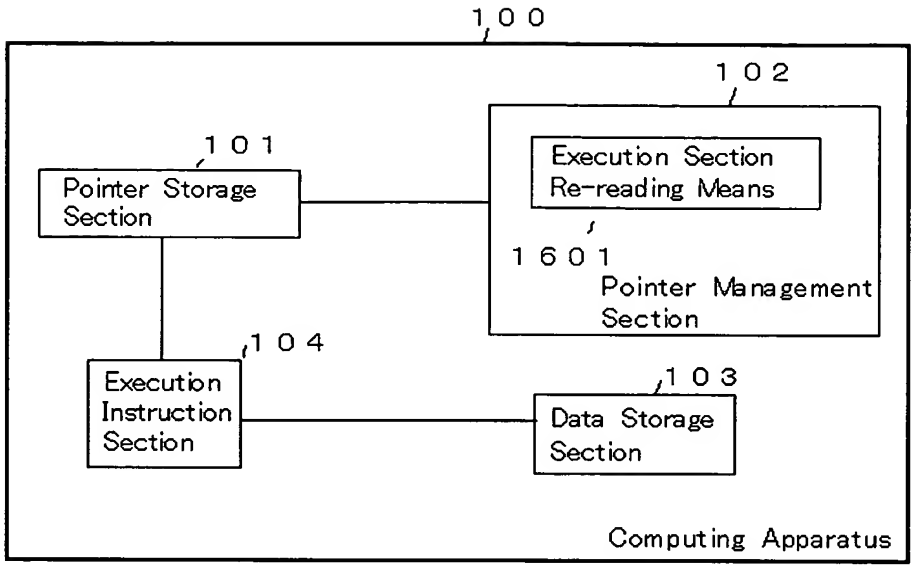

100
102
101
Pointer Storage Section
Execution Section Re-reading Means
1601
Pointer Management Section
104
Execution Instruction Section
103
Data Storage Section
Computing Apparatus

Fig. 1 7

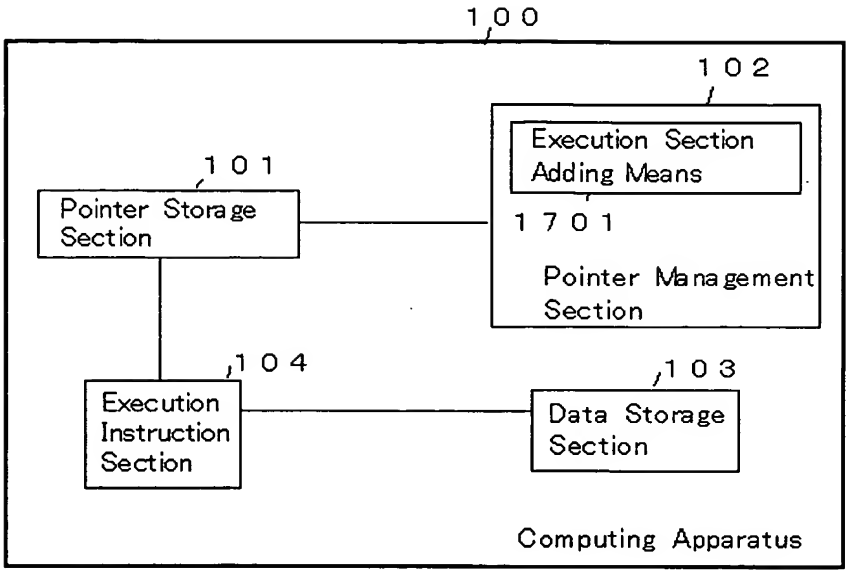

100
102
Execution Section Adding Means
1701
Pointer Management Section
101
Pointer Storage Section
104
Execution Instruction Section
103
Data Storage Section
Computing Apparatus

Fig. 1 8

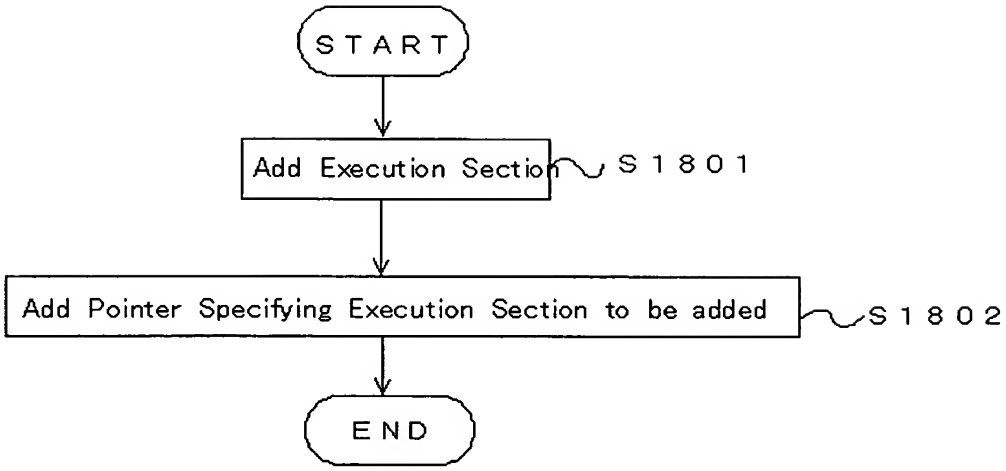

START
Add Execution Section
S 1 8 0 1
Add Pointer Specifying Execution Section to be added
S 1 8 0 2
END

Fig. 1 9

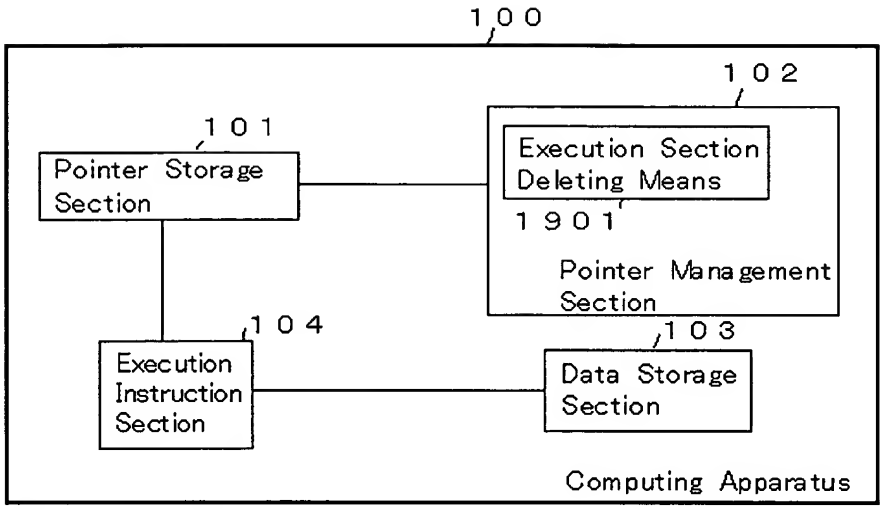

100
102
101
Pointer Storage Section
Execution Section Deleting Means
1901
Pointer Management Section
104
103
Execution Instruction Section
Data Storage Section
Computing Apparatus

Fig 2 0

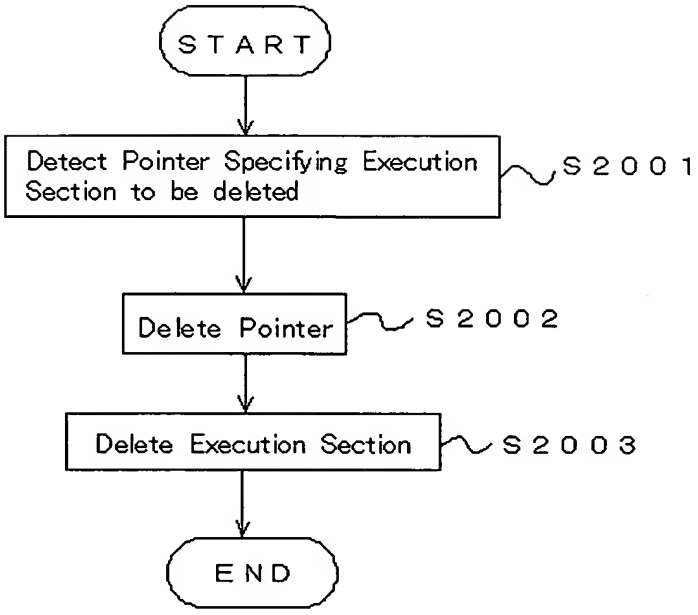
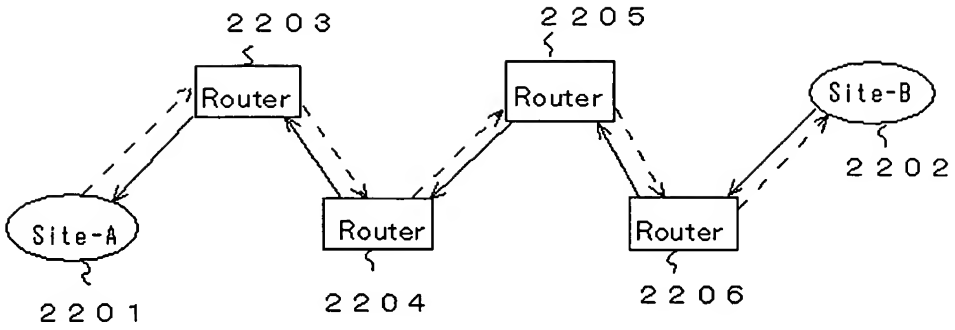

START
Detect Pointer Specifying Execution Section to be deleted
S 2 0 0 1
Delete Pointer
S 2 0 0 2
Delete Execution Section
S 2 0 0 3
END

Fig 2 1

```
struct  pointerlist   *pl;
void    (*ep)();                                  ... (a)

ep  =  (void (*)()) 0×284729EC;                   ... (b)
pl  =  pointerlistbase;                           ... (c)
while ( pl ! = NULL ) {
   if ( pl —> fp == ep)
      break;                                      ... (d)
   pl  =  pl —> next;                             ... (e)
}
```

Fig 2 2


2203
2205
Router
Router
Site-B
2202
Site-A
Router
Router
2201
2204
2206

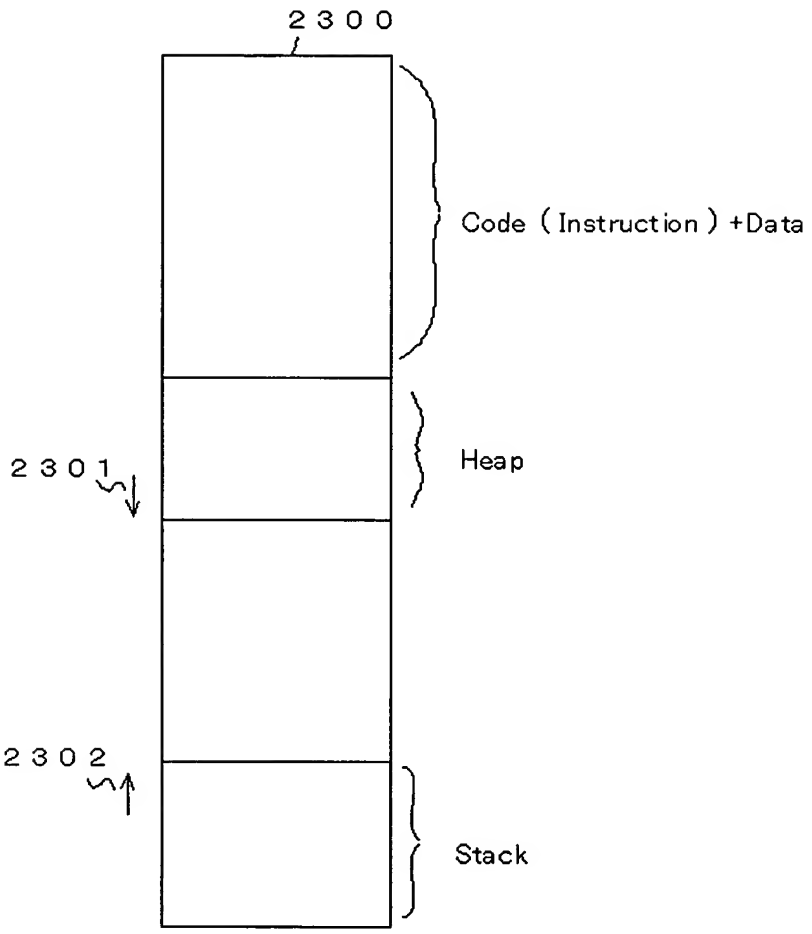



Fig 2 3